

MACDONALD COLLEGE JOURNAL



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We Are All Neighbours

Canadian export trade has undergone a profound change during the last two decades. Prior to the war we were partners in a trade triangle which was of great benefit to the parties concerned. We exported a surplus of agricultural products to the United Kingdom and imported a surplus of industrial products from the United States. Our surplus of pounds from the United Kingdom were converted into United States dollars in order to pay for our imports in excess of our normal trade with her.

This system worked well until changes brought about by the war altered our normal trading relationships. One of the major effects of the war upon Canada was the drying up of the United Kingdom dollar sources. This meant that we could not convert our surplus pounds into dollars as we had done previously. The pounds had to be spent in the United Kingdom or else saved until such time as the industries of the United Kingdom had expanded sufficiently to meet our needs and those of her other customers.

This was a big problem but we had to face up to it for we are the third largest trading nation in the world, and our prosperity depends upon a large volume of international trade.

We concentrated on increasing our exports to the United States where many of our products such as bacon, seed potatoes and certain cheeses command a premium. This was good business but many people thought that we were putting too many eggs in one basket. We all know what happens in one crop farming areas; when the price is high the farmer is well off, but when it is low he suffers hardship to a greater degree than his neighbour in a mixed farming area. As long as the economy of the United States is running in high gear we can sell large quantities of our farm products to them, but if they slow down we may be left with surpluses again.

This is our second problem, it is a direct result of our efforts to solve our first problem. It will be seen

that none of our problems like Topsy "just grew", but that one is the outcome of the other, that is, they are linked together to form a chain.

This problem chain is not peculiar to Canada, each nation has to face up to it. Individual nations adopt policies designed to solve these problems from a national viewpoint, and very often conflicts arise between these national solutions so that the original problem is intensified rather than lessened.

We all know that when we work together as a unit much more can be achieved; as farmers we benefit from co-operative marketing or the co-operative ownership of machinery. In just the same way we benefit as nations from the adoption of international rather than national policies for the solution of our problems.

Agreement on an international plane is more difficult to achieve than national agreement because we are dealing with many people who view the same problem from different angles. It requires that we widen our outlook and be willing to concede that there are other angles to these problems than our own.

Our world cannot afford to be broken up into factions; too much is at stake. In the days when disturbances could be localized so that nobody was hurt too much, people didn't bother about these things. The advance of science has, however, forced us to take notice for our survival depends upon the finding of peaceful solutions to our problems. We depend as much on stable conditions existing in let us say India or Burma as we do upon the well-being of our own community, for in the last analysis we are all neighbours.

Our Cover Picture

Cold nights and warm sunny days bring the sap into the buckets. Will our upside-down winter weather give place to normal sugar-making weather or will it not? The sugar camp pictured on the cover this month is down in Beauce County, on the farm of Leon Jacques.

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Figures Don't Lie

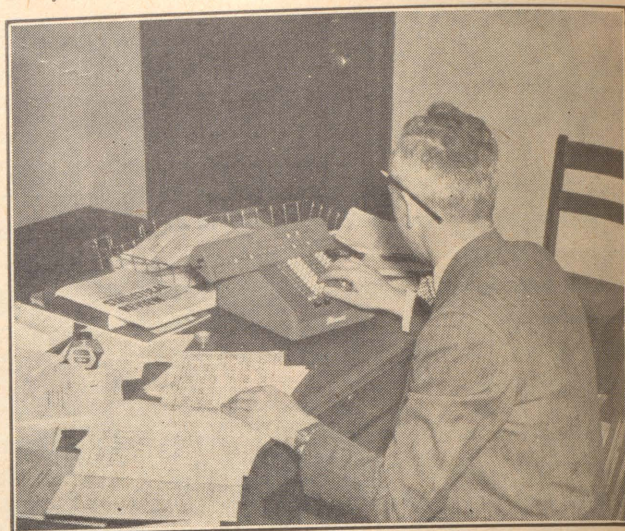
by J. M. Gray

Last November, Dr. Hope suggested that farmers should make greater use of the Economics and Statistics branches of the Government in planning their production. This article, written by a civil servant, explains what goes on at the Dominion Bureau of Statistics.

THE Oxford Dictionary gives three definitions for the word "statistics": one of these is "the department of study that has for its object the collection and arrangement of numerical facts or data relating to either human affairs or national phenomena." Another definition from the same source is simply "numerical facts or data collected and classified". In plainer words, statistics is the process of collecting numerical information on almost any subject which lends itself to measurement; the word is also usually understood to mean data pertaining to a community or state rather than to an individual organization operating at a private level.

That branch of the science of statistics which exists to serve the social sciences—business, government etc., can be thought of as providing a means of making quantitative measurements of current position, developments, trends, etc. Quantitative measurements of economic trends have considerable practical use. An example can perhaps serve to illustrate this point—if the price of say apples were low at any particular time, such as last fall, we would tend to think that the supplies on hand were larger than normal. It is the function of the statistician to say whether this is so or not—everyone knows that the crop is larger; but how much larger. To know how much can be quite important to all sorts of people including growers and shipping organizations wanting to sell apples, wholesalers and other merchants wanting to buy them, trucking concerns in the fruit growing areas and processors.

To push on with our example; the agency responsible for publishing statistics has this problem to face every year. The provisions of objective estimates as accurate as possible for each producing area enables people in the trade to decide whether their local supply situations are general or not. Very probably the 1950 apple situation is one of the best illustrations of this—last year there were heavy apple crops in Ontario and Quebec and light ones in Nova Scotia and British Columbia. Knowledge of this situation was likely of some importance to anyone in the apple business. Without a co-ordinated federal and provincial statistical service, apple men in the central provinces would have been without information on the crop in either coastal province, except that which could



A lot of figure work goes into the information put out by the Dominion Bureau of Statistics.

have been gleaned from rumour or in unofficial sources which might be suspect on grounds of incompleteness and disinterestedness.

The stories which figures can be made to sell—statistics—are of two kinds and any statistical service should have both these ends in mind at all times. One is the provision of an up-to-date, current picture of the situation at any particular time. That is, we should like to be always in a position to provide an answer to the question, "what are conditions today?" In Canada there are some obstacles to providing as complete a service for horticultural crops as we would wish, which are inherent in the nature of Canadian geography. Canada has been called a "strip country" meaning that the occupied part is in the shape of a narrow strip running east and west. The result of this is that most of our farm lands lie in nearly the same latitude. From one end of the settled part of our country to the other, the climatic variations are limited; much more limited than between the states of Maine and Florida in the United States for instances. Hence, the products of most of our specialized horticultural areas tend to come on the market in quick succession. This creates a problem for the statistician attempting to provide up-to-the-minute data. The point of this is that probably it would be quite useful for a berry grower in Ontario to know all about the size of the current maritime crop before he marketed his own crop; but unhappily time is insufficient. In some cases it is a matter of a week or even less between the time when a crop in one area and that in another comes on the market. Obviously time is insufficient to prepare revised estimates on the size of the crop in the first area before that in the second is ready for market. In the case of apples, pears, potatoes and storage vegetables, however, the marketing season

is long enough to permit the collection and publication of detailed data on the current crop.

The other phase of our work is the preparation of continuing official series of "Canadian totals". One of the Dominion Bureau of Statistics' responsibilities is to provide official national data as distinct from the regional information supplied by individual provinces. This involves more than merely adding up the provincial figures. Even where complete data are published by provincial authorities, there is need for co-ordination of effort and standardization of procedure and terminology, etc. Comparability between areas can be secured only through co-ordination.

Reliable time series of production and disposition provide the measure of an industry's progress and a country's progress. Series of fruit production for instance, indicate in which sections of the country the business is expanding and where it is contracting and at what rates. Anyone considering planting an orchard might find it helpful to consult such sources of information.

It may be of interest to point out here that the collection and publication of official statistics are undertaken by the governments of virtually all countries. Without such data the formulation of national policy would be most haphazard. In time of war, statistics become a weapon of war.

In order for statistics to fulfil the rôle which they are meant to fulfil and to be of full use, they must have a certain quality. As great a degree of accuracy as possible is essential. In addition, the agency by which the work is undertaken must be completely disinterested.

Having examined some of the broader aspects of our topic we may now turn to the development and set-up of the principal organization which now exists for the collection, processing and publication of statistics, including of course agricultural statistics in Canada—the Dominion Bureau of Statistics, which is under the direction of the Minister of Trade and Commerce.

In the field of agricultural statistics prior to 1908 there were no estimates or statistics covering the whole of Canada excepting those gathered at intervals by the censuses. (The British North America Act provides for a census to be taken every 10 years.) In 1908 a permanent census and statistics office was established under the Minister of Agriculture to collect, abstract and tabulate, agricultural, commercial, criminal, educational, manufacturing, vital and other statistics and information, from time to time in the inter-censal years of each decade. Even after the setting up of the statistical office, however, other statistical branches within the federal service continued to increase in number and scope. The consequent duplication of effort and diversity of results in many fields of statistics led in 1912 to a suggestion that some effort be made to co-ordinate and unify Canadian Statistics. To this end a commission of parliament was set up

and a report made recommending the organization of a central Canadian statistical office to bring under direct control all statistics except those which are by-products of departmental administration, and to establish a system of co-ordination with provincial government in order that statistics collected by provinces be rendered capable for inclusion in Dominion totals.

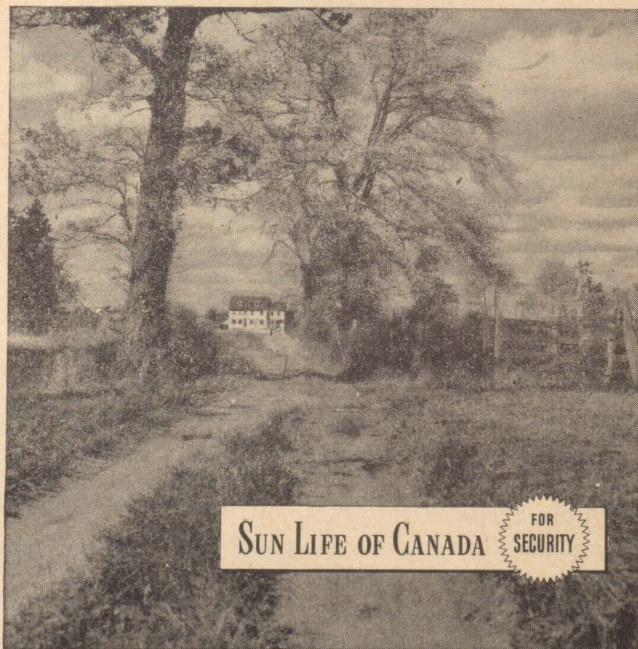
Six years later in 1918, the Dominion Bureau of Statistics was set up in accordance with these recommendations, under the Statistics Act. Some comment on the division of authority between federal and provincial governments may be of interest here.

Under the British North America Act, statistics are one of the subjects pertaining to Federal as distinguished from Provincial jurisdiction. This does, not mean; of course, that the provinces may not collect statistics. It does, however, imply that the Federal Government has the duty of organizing the statistics of the country as a whole and for national ends. There is not, therefore, a sharp distinction between what comes under federal and what comes under provincial jurisdiction in this field, as there is in some others.

The Dominion Bureau of Statistics is divided into several Division: viz., Administration, Agriculture, Census, Education, Health and Welfare, Industry and Merchandising, International Trade, Labour and Prices, Mechanical Tabulation, Public Finance and Transportation, Research and Development, and Social Surveys. Thus



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SUN LIFE OF CANADA

FOR
SECURITY

virtually all the statistical work of the Canadian Government is under the one roof. In the centralization of all statistical work within one department (which incidentally is not followed in all countries) it is possible to discern at least three distinct advantages.

- (1) One is the efficiency achieved by having a central pool of tabulating and addressing equipment, etc.
- (2) The second is the opportunity of bringing to bear a concentration of resources on statistical problems which would not otherwise be possible.
- (3) The completely objective position which it is possible for an impartial independent organization not associated with the administration of government policy, to take.

Within the Bureau of Statistics there are two groups which deal principally with agricultural statistics, the

Agriculture Section of the Census and the Agriculture Division. This latter is responsible for the current estimates for agriculture while the Census is concerned with collecting and compiling data for the ten year census and the five year census of the three Prairie Provinces. Close co-operation exists between these two divisions.

In addition certain other units of the Bureau provide information of value to the horticultural trade. The Cold Storage Unit prepares reports on the holdings of fruit and vegetables, which are obtained for the most part by fruit inspectors and the Industry and Merchandizing Division puts out production and storage figures for canned goods. The work of the Foreign Trade Division also comes into the picture. Exports and imports of fresh and processed fruits and vegetables are compiled from custom house records.

Building Humus With Green Manures

IN areas of specialization or intensive cultivation of row crops, such as south-western or eastern Ontario, where seed-corn, soybeans, potatoes, tobacco and vegetable production predominate, much of it on inorganic soils, there is a growing realization that the problem of maintaining the organic matter of the soil is a serious one. In some of these areas green-manuring crops, and sometimes straw and poor-quality hay, are being used as a means of restoring the humus content.

Recent reports from experiment stations in the Netherlands are of interest in this respect, since they enable calculation of the approximate increase in humus to be expected from such additions. The Netherlands station has estimated that the amount of organic matter provided, in the top eight inches of soil, by the roots and stubble of green-manuring crops probably is not more than seven hundred pounds of dry material per acre. Assuming that the green weight of the above ground part of the crop is eight tons per acre for Japanese buckwheat or fall rye at full bloom, and that the water content of this green material is seventy per cent, the total dry material added when the crop is plowed under is about 5500 pounds. This is about the same amount as is added in a ten ton application of fresh manure.

Soil workers in the United States have provided information on the rate at which added organic matter is lost by decay in the soil. Under conditions favourable for changing the added organic matter into humus they have found that about seventy per cent of the weight added to the soil is lost by decay in the first two months, after which the loss falls to about one per cent of the weight added per month.

From the figures given by these experiment stations it appears that, when an eight ton crop of green manure is plowed down the actual increase in humus content of the soil is not more than 1600 pounds, or less than one

ton, per acre. At this rate ten such additions would be needed to raise the humus content of the top soil one per cent. If a single green manure crop alternates with a potato crop the following year, and no manure is used on the latter, upwards of twenty years would be required to increase the humus content one per cent. The Netherlands workers and others, have shown that the organic matter left behind in the soil by a potato crop is so small as to be quite unimportant.

Vegetables and other annual crops, leave relatively small amounts of organic matter in the soil. Merely to maintain the humus content, without increasing it, is difficult or impossible where such clean cultivated crops are grown regularly without manure and with only occasional use of green manures.

When a productive grass sod occupies the land, the report from the Netherlands station indicates that the weight of roots produced and decaying each year is about 5000 pounds per acre. This report also shows that there will be about 5000 pounds of organic matter present when the sod is plowed. The advantage, from the standpoint of conservation of the humus content of the soil, of a live-stock system of farming with use of farm manure and of rotations containing at least two years of sod crops, is obvious.

Serious fires often result from the dangerous habit of using coal oil to light a stove. Bits of old wax candle ends, small amounts of oily wrapping paper, used wax paper or bits of stick dipped in melted wax, are all helpful in getting a fire started without the uncontrollable flare-up of coal oil.

Red Cross Campaign
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You Can't Take It With You

by Colin Muirhead

We take the soil for granted — there's so much of it. It might pay us big dividends, however, to think a little more about this most vital element in agriculture.

THE Canadian Indian used to place a fish in the ground before planting his corn seed over it, and he was amazed when the early white settlers ignored this little ritual and planted their crops without the benefit of any fertilizer. Gradually the white man's crops became poorer until he followed the advice of the native Indian and used some sort of decaying matter to build up the humus content of the soil.

The native Indian had given considerable thought to the best means of growing crops; he most likely tried many methods before he found the best one—learning by trial and error. Let's look at agriculture to-day. How many farmers are there who still plow up and down hillsides; who use stony areas for purposes which they were never intended; who keep poor pastures year after year? We can't get away with poor farming methods indefinitely; sooner or later we are going to be caught in the big squeeze. Either we use the land for that which it is best suited or it will lose its fertility and fail to provide us with enough food for our own use and those of our customers.

Nature treats the earth kindly—man treats the earth harshly. There is a lesson here for all of us—a lesson which would indicate that something is vitally wrong with our thinking. If we saw a neighbour running his car into a concrete wall, bending fenders and doing other damage, we'd say he was crazy, and we'd be right. To damage or mis-use a farm falls into a far more dangerous category, yet when we read about or see farms that have been grossly neglected we often shrug our shoulders and adopt a "too bad, but he owns it and there's nothing I can do" sort of attitude. This is negative thinking, and a



One of the principal causes of soil erosion is the careless cutting of timber from hillsides.

dangerous view to take, for those few inches of top soil that in so many cases are being badly mis-used are all that stands between us and starvation. Our whole civilization depends upon the correct use being made of that thin layer of soil. No single person or group of persons has any right to do what they wish with our most important resource. It's so much easier to conserve than to re-build—and cheaper too. Both Canada and the United States are finding this out the hard way. Like the Indian we have for far too long been content to learn by trial and error, and now it is costing us millions of dollars to repair the damage.

Closing the stable door after the horse has escaped is adopting a policy of too little and too late. It would have been much easier and less expensive to have placed a latch on the door in the first place. So it is with our soil resources, prevention is easier than cure. It's far easier to use our soils in keeping with their capabilities so that the fertility remains.

We don't need to wander very far from home to find examples of this either. The big irrigation and soil reclamation projects which have received wide publicity

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It costs a lot of time and money to restore land which has been badly used. Good farming practices would see that such scenes did not occur.



Poor use of the land undermines the soil and pulls it loose. Then rain and frost get in and the whole section falls away exposing the soil to the wind.

in the United States and Canada, such as the work carried on by the Tennessee Valley Authority, are well known and always in our mind, but it would be to our advantage to look around our own province, and while something is being done we still have far to go before we can increase our peace of mind.

Let's Look at Quebec

Let's look for a moment at the situation as it is now in Eastern Canada. Many of our hardwoods including sugar maples and beech are falling prey to diseases. The cause is mainly attributable to drought conditions brought about by a lowering of the water table which in turn has been caused by indiscriminate cutting of our timber resources. There is a link between each of these disasters, a cause and effect which widens as we continue to misuse our resources, and there will be no halting this slow drain unless and until we adopt preventative measures.

Settlements of areas unfit for the type of farming indulged in, with the consequent burning and cutting of the forest growth was the cause which set this chain of events in motion. Don't let us think that our ancestors deliberately carried out these policies; they meant well, but they just didn't know.

Many of the birch stands in the Maritimes and Eastern Quebec fell victims to this policy, and now farmers in the Eastern Townships and around Montreal are complaining that their sugar maple groves are disappearing. There are plenty of people throughout these areas who remember when a certain creek ran all year, which now dries up in the summertime, or when some pond or well was continuously full which is now dry for three or four months in the year. These factors are the outward signs, the danger signals that we are not farming in harmony with our surroundings. Merely to say that these are the factors which are affecting our tree growth and our pastures, many of which turn brown during mid-summer when years ago they would stay green, is not enough. *We have to do something and do it now.* Increasing mis-use of the land increases the speed with which the next chain in the reaction comes about. Like a snowball rolling downhill, it gathers speed as it progresses.

When we say that we want to use our soil resources for the benefit of all, what do we mean? How do we define it? A United States Department of Agriculture publication puts it this way; it says that the soil resources of the United States "should be used to maintain the highest possible standard of living for the people of the United States." It goes on to say that this "includes secure farm homes, adequate and stable incomes for farm people, and a continuous and abundant supply of farm products for all of the people." What they are saying is that the soil problem is really a problem of the well-being of people.

It is not, however, a problem that once faced can be overcome, for each generation has to meet the problem in varying forms, and each in turn has to find an answer if the Nation is to live. The Bible speaks of irrigated highly fertile areas throughout areas which are now desert—all around us we have mute evidence of what mis-use of the soil will do to a land and the people who live thereon.

What all this boils down to, is how can we best serve our own longtime interest without sacrificing our present necessities? This question is basic to any solution of the land use problem. We have got to think of what sort of a plan we want, and how to put it in operation before we go any farther.

People who are most affected are those in the lower income brackets—people who are scratching a living from poor land, land which shouldn't be farmed at all. Whenever we get conditions of this type, inadequate incomes to be divided among many farmers, the problem becomes most acute.

There are three suggested routes we can follow. Some people say we should move all the people off these poorer farms, get them out of agriculture altogether and into jobs in industry; if these jobs are not available then they should be created by reforming our industrial system. Others suggest moving these farmers to better farmlands, keep them in agriculture, they say "because these people are making a modest living out of agriculture and their chances of enjoying a moderate degree of security are

just as good in agriculture as in industry. Also the city birth rate is low and we need a high population on the land where the birth rate is high in order to replenish our cities with a constant infusion of new blood." While still others take the view that both these views are too extreme, they advocate a middle of the road course, where the effects upon the area concerned would not be so severe. What we need, they say, is to take a land survey, classifying all our land according to certain standards and then as people leave the poor areas don't allow anybody to move in. All help possible should be given to those who want to leave. Part-time employment in industry coupled with a few acres at home would aid considerably. This policy, of course, involves the question of whether industry is willing to decentralize fast enough, or in fact at all to help these people.

Need To Increase Your Income?

It's not always the big things that make the most money—there are plenty of sidelines which, if they are used wisely, will bring in a steady income.

The farm woodlot falls into this category. This is a potential source of income that is seldom exploited to the utmost. We have talked to too many farmers who, except for a winter's supply of firewood, never give the wood-lot a thought. Yet here on practically every farm in this province is a potential source of additional income.

The wood-lot, like the rest of the farm, should be worked on a sustaining basis. Flocks and herds are culled, mature animals are sold to make room for more vigorous ones. So it is with the wood-lot. Old or diseased trees are cut, room is provided for the young ones to grow. To make matters a lot easier, most of the bush work comes at a time when other farm work is at a standstill. It helps to keep the farm labour force fairly well employed throughout the year by spreading the work.

Not long ago we were reading about a farmer in Ohio, who, through good management practices, has made his twenty acre wood-lot pay off to the tune of over five-hundred dollars per year for the last twenty years—a tidy little sum, which may make all the difference between enjoying a few of the luxuries of life or just looking at them in a store window.

He removes mature and cull trees for saw timber and fire-wood, and in the spring makes maple syrup. His income from these sources is divided up this way; saw timber \$152 per year, value of the firewood used on the farm \$151 per year, maple syrup has brought a return of \$246 per year. All these figures are averages over the twenty year period. No account in these figures has been taken of timber used for fence posts and poles.

The wood-lot has since been taken over under an experiment station program and more detailed figures

This latter policy is one of clearing out the rural slums by a policy of gradualness—it is not the whole answer, far more is involved than just clearing a few of the poorer farmers off the land as has already been suggested. There is no one answer to soil mis-use.

What we have tried to point out in this article are some of the factors involved in a study of the problem of better land use. Within the next few months we hope to present articles of a more constructive nature, showing what we should do, and how we can go about the job. An effort will be made to direct these articles, as has been done with this one, upon the problems affecting Eastern Quebec, for these are the problems we know about, can feel and understand, for they concern all of us directly.

are available as to the returns made from the different types of work carried on in the bush. These figures show that the 172 hours spent on the sugar bush yielded \$1.29 per hour. Time spent working in the woods amounted to 170 hours, and brought a return of \$1.17 per hour. All of which goes to prove our contention that it is not the big things that always make the most money.

"JOE BEAVER"

By Ed Nofziger



Forest Service, U. S. Department of Agriculture

"Look at that amateur! He broke his axe!"

Report On The Canadian Federation Conference

"WE would like you to produce some more butter, but no more of anything else," the Right Honourable J. G. Gardiner, Federal Minister of Agriculture told the assembled delegates at the Canadian Federation of Agriculture conference.

The annual Federation conference was held at the Windsor Hotel, Montreal, from January 21-25, 1952. It was attended by delegates from British Columbia to Prince Edward Island. Quebec province as host to the conference was well represented through the Farm Forums, the Co-operative Federee de Quebec and the Union of Catholic Cultivators. The presidents of these organizations, Neil Creller, H. C. Bois and J. A. Marion are also on the Federation Board of Directors for 1952, while in addition to these duties Mr. J. A. Marion is Second Vice-President of the Federation.

In regard to butter, Mr. Gardiner stated that by far the greater amount of milk for butter and cheese comes from small farms. These farmers are not strictly speaking dairy farmers, the milk they produce, therefore, would not be available for human consumption as fluid milk—it is of necessity used for butter or cheese, and the government by setting a floor price under these products has protected them from a too serious price drop with a floor under their products. He stressed the fact that the floor price was not an incentive price, that the government had no intention of using it as such, now or at anytime.

The Minister also stressed non-farm policies which the government has adopted such as old age pensions and unemployment insurance which help to keep the purchasing power of the lower income groups up. The net result of these policies, plus the increase in the population, he said, had been responsible for the fact that Canadian were eating about thirty or forty per cent more of the staple products which the farmer depends upon for his income than they did prior to the war.



The Prime Minister speaks to the Conference. That's Mr. Hannam on the left.



Mr. Dubé opens the public session in the Windsor Hotel. Mr. Marion, president of the U.C.C., and Mr. Hannam, president of the Canadian Federation of Agriculture, on the right.

Mr. H. H. Hannam, president of the Federation, said in his annual address that the total volume of agricultural production increased 35 per cent or more since pre-war. During the same period the number of agricultural workers declined by 15 per cent. This has meant "a big step forward in productivity and efficiency." He stated that this advance in efficiency and the general standard of efficiency among agricultural workers "is at least equal to that attained by non-agricultural workers."

In the evening of January 22, the members were tended a banquet by the Quebec government, at which the Right Honourable Louis St. Laurent, Prime Minister of Canada, was the guest speaker. He urged the need for Canadians to work together for national unity.

Dr. Hope, Federation economist, in his Outlook report to the conference suggested that now would be a risky time to convert from milk to beef as the upturn in beef cattle numbers has already occurred by 1951 the number of beef cattle was 200,000 more than in the low year of 1949. As the beef cattle herds were and in many cases still are being built up, the number of marketing declined. This gave the illusion that beef was scarce, when in reality it was only the marketing that was short. Herds were being built up, and substantial marketings may take place in future years. When these increased marketings will come and what price they will bring depends upon economic conditions over the economy as a whole.

Canada may still look for a further reduction in supplies of milk during 1952, however. The June live-stock survey indicated that the number of yearling heifers kept for milk purposes has increased. The general tenor of the report was based upon the assumption that general world economic conditions are to remain in their present conditions of unrest.

One of the most important problems dealt with from an Eastern Canadian point of view was the bringing forward of a resolution dealing with the necessity for some form of control over the pricing of Western feed



Mrs. Nadine Archibald, Secretary and Treasurer of the Nova Scotia Farmers Associations and Eastern Women's Representative on the C.F. A Board of Directors jokes with the Prime Minister and Mrs. Harkness, Grandview, Manitoba, Western Women's Representative on the C.F. A Board of Directors.

grains to the Eastern feeder. The case for eastern Canada was presented by Quebec Farm Forums, the Union of Catholic Cultivators, the Co-operative Federee de Quebec, the Maritime and Ontario Federations of Agriculture. The outcome of this matter is still pending at time of publication but the Canadian Federation expressed considerable sympathy with the plight of the Eastern feeders, and some form of agreement would seem to be in sight.

Nylon Cuts Tire Costs

Added life to farm truck and tractor tires is foreseen with the increased use of nylon cord by Canadian tire manufacturers. Truck tires are already made in Canada containing nylon shock shields.

After repeated tests in both Canada and the United States, nylon was found to be a superior fabric for tire cord. Outstandingly strong, it is light and highly resistant to impact shock, flex fatigue and heat. The interior of a tire often builds up a temperature of 200 degrees Fahrenheit. This heat increases air pressure in the tire by as much as one-third which robs other types of fibres of strength and resilience. But nylon is unaffected by even higher temperatures. Further, nylon cord tires run cooler because its fibres are smoother and do not set up the same amount of friction.

As tire cords flex under great pressure from above and tension from within, the fibres "saw" over and across one another each time the wheel turns. This produces "flex fatigue"—a breakdown of strength. Being stronger, smooth and uniform, nylon withstands flexing better than other fibres. The toughness and resilience of nylon enables the tire to "give" under heavy impact and recover without breaking the strands or impairing the strength of the fabric. This allows a nylon tire to take several recaps after the tread is worn smooth.

Since nylon is rot-proof, it is not damaged by moisture which seeps through cuts and cracks in the rubber casing as is the case with cord made with other fibres.

'52 A Good Year For Poultrymen

Expanding markets for packaged ready-to-cook poultry, iced chicken and broilers has been a feature of the past year in the poultry industry according to W. J. Landreth, president of the Canadian Poultry Council. Mr. Landreth was speaking to the fourth annual meeting of the Council.

He expressed confidence in the future of the industry, stating that the increasing opportunities for employment in an expanding economy would seem to assure poultrymen of a reasonable price for their produce throughout the coming year.

Professor W. A. Maw head of the Poultry Department, Macdonald College, said that concern is being felt in regard to the present market conditions of softening prices due to processors being unable to handle receipts because of lack of low temperature storage space in the Montreal area. Some storage space usually available for poultry products was being used for butter, pork and vegetables for canning. Professor Maw went on to say that the present feed cost and price ratio has already caused cancellations in orders for early chicks which may affect the number of pullets to be brooded and later produce a shortage of summer and fall eggs. According to W. R. Pearce, Sheffield Mills, N.S., however, most of the producers would seem to be reasonably satisfied with present conditions.

A discussion of Newcastle disease and of the various measures that have been instituted to control this disease took up much of the Council's time. It was learned that the Federal Department of Agriculture has agreed to furnish the new A.D.R.I. Killed vaccine free of charge for a limited time to any province requesting it.

In the absence of Dr. C. A. Mitchell, Director, A.D.R.I. Hull, Quebec, a statement was read which indicated that work is still being carried on in the lab with this vaccine, and so far no undesirable effects have been noted in livability or production. Field tests are also being made and so far the results have been favourable. It is thought that a considerable resistance will be built up in the majority of the inoculated birds which will last for several months.

The present support price of 38 cents was considered too low and it was suggested to the members of the Price Supports Board who were present that an increase of at least four cents to 42 cents should be offered.

Much of the lack of success in growing house plants arises from too high temperature, too low humidity and insufficient light. Over-watering or tightly packed poor soil are also responsible for a great deal of failure. Illuminating gas or coal from the furnace in quantities barely noticeable to humans, can be deadly to house plants.

Put and Take

Legume crops such as red clover are grown, and manure and fertilizers are applied to put nitrogen into the soils; crops take it out. Are our soils becoming richer in nitrogen? Is the farmer winning? Dr. P. O. Ripley, Dominion Field Husbandman, Ottawa, recently provided information relating to the main farm rotation at the Central Experimental Farm which helps in calculating the odds in this game. This rotation contains the following crops, corn silage, oats, legume-grass hay, legume-grass pasture and barley. The figures given by Dr. Ripley were as follows:

| Crop | 20-Year Average Yield per Acre | Pounds of Nitrogen Removed per Acre per Rotation |
|-------------------------------------|-----------------------------------|--|
| Corn Silage | 17.8 T. | 102 |
| Oats | 57.0 bu. | 48 |
| Hay | 3.3 T. | 160 |
| Pasture | Not given | 40 |
| Barley | 41.0 bu. | 51 |
| Total Nitrogen removed per rotation | | 401 pounds |
| Fertilizer Applied | Amount Used per Acre | Pounds of Nitrogen Added per Rotation |
| Manure | 20 T. | 200 |
| 4-12-6 | 200 lbs. | 8 |
| Total Nitrogen added per rotation | | 208 pounds |

In the case of the pasture crop Dr. Ripley assumed that one-quarter of the nitrogen in the herbage was used by the animals and three-quarters returned to the land.

These figures show a net loss of nearly 200 pounds of nitrogen per acre per rotation period of 5 years. The situation really is not so bad as that because the legumes grown are able to add some nitrogen which they take from the air. The amount of nitrogen gathered in this way by red clover has been estimated to be about 125 pounds per acre. If it be assumed that one-half of this is in the roots and stubble, about 65 pounds would be added to the 208 pounds otherwise returned to the soil. This still leaves the nitrogen balance in the red. When alfalfa is the legume grown the amount of nitrogen gathered from the air in two years and left in the roots and stubble is not likely to be more than about 200 pounds, just about enough to balance the books.

There is evidence that certain Canadian soils at least are declining in nitrogen content. Maintenance of the nitrogen content is not easy, even under relatively good management such as that described above.

Trends In Farming

Canadians are big pork eaters; during 1950, we ate 75 pounds of hog products. Beef was next with 60 pounds per capita, followed by poultry at 22 pounds per capita and lamb at 2.5 pounds per capita. We also consumed 23 dozen eggs each, 22 pounds of butter and 4.6 pounds of cheese.

One of the factors keeping pork consumption so high is the high price of beef. We are importing some beef from the United States, but this will make little difference to our price level. The cost of living is higher in Canada than in the United States, where they have used controls to stop the upward spiral. When Canadian prices get way out of line, United States exporters will ship their produce to Canada—this will have the effect of holding the rising Canadian living costs in check.

The amount of fertilizer which will be available to Canadian farmers in 1952 is uncertain. The super-phosphate supply situation is not fully known. We import much of this commodity from the United States where an overall shortage is expected in the face of increased consumption. Nitrogen and potash supplies will, however, be adequate.

In view of the uncertain situation some farmers may consider buying their supplies earlier. If so store in a dry, well-ventilated building. The windows should be left open in dry weather, closed in wet weather. The bags should never be stored more than seven high, and should be placed on skids, not on the bare ground. It pays to leave a space between the bags for circulation, and to place some straw on top of the pile to prevent moisture from settling on the bags.

Co-Ops to Enter Margarine Business

Saskatchewan Federated Cooperatives Limited, the provincial co-op wholesale, has entered into association with the Saskatchewan Dairy and Poultry Pool to produce margarine from vegetable oils. The new scheme will make use of excess plant and equipment owned by the Pool, and production will begin in the very near future.

In entering the arrangement to manufacture margarine SFCL officials recognized the very great demand for margarine throughout the province. It was felt that if consumers were going to use margarine, it was desirable that SFCL enter the production field to ensure maximum service and savings to its member associations.

On the other hand, the Dairy Pool found that its ordinary operations did not utilize all its equipment and plant space. At the same time a general decrease in the volume of cream and milk produced by the farmer members had been reflected in decreased business volume by the Pool. By utilizing its excess equipment and plant in the production of margarine, the Dairy Pool can protect the investments built up over the years by its members and at the same time fully serve those members who are still producing cream and milk.

The decision of SFCL and the Dairy Pool to co-operate in the production of margarine is but one example of how consumer co-operatives and producer co-operatives can get together to furnish needed goods and services to their members.



DEPARTMENT OF AGRICULTURE

*Activities, Plans and Policies of the Quebec
Department of Agriculture*

Varieties of Field Crops Recommended By The Quebec Seed Board, 1952

GRAIN CROPS

OATS:

Early:

Ajax: Very good yield, good straw, resistant to stem rust.

Cartier: Excellent quality, very good yield.

Mabel: Excellent quality, very good yield, resistant to leaf rust.

Medium: (4 to 7 days later than the early varieties).

Beaver: Excellent quality, some resistance to leaf and stem rust.

Erban: Excellent quality, very good yield, resistant to leaf rust.

Vanguard: Very good yield, resistant to stem rust.

Medium to Late: (8 to 12 days later than the early varieties).

Roxton: Very good yield, very good quality. Some resistance to stem rust, and definitely more resistant to leaf rust than the other varieties recommended.

BARLEY:

Rough-Awned varieties:

O.A.C. 21: Six-rowed, early, good yield, generally adapted and especially recommended for malting.

Pontiac: Six-rowed, about two days later than *O.A.C. 21*, good yield, good straw and generally adapted.

Smooth-Awned varieties:

Byng: Six-rowed, early, very good yield. (Not recommended for very rich soil where lodging is likely to occur).

Montcalm: Six-rowed, early, very good yield, recommended for malting.

Velvet: Six-rowed, early, good yield.

WHEAT:

Coronation II: Bearded, white-chaff, late maturing, good for breadmaking, resistant to stem rust.

Garnet: Beardless, very early maturing, and good for bread-making.

BUCKWHEAT:

Japanese: Smooth hull, large seed with vigorous growth.

Rough-Hull: Very small seed, rough hull, suitable for feeding purpose only.

Silverhull: Smooth hull, small seed.

FIELD PEAS:

Arthur: Medium maturity, medium size, short straw, suitable for grain and for soup.

Chancellor: Early, small size, medium length of straw, suitable for grain, for O.P.V. mixture, and for soup.

FALL RYE:

Horton: Should be sown between the first and the tenth of September for grain crop. Very good yield of grain. Could also be used as a green manure or spring pasture.

FIELD BEANS:

Improved Yellow Eye: Early, very large seed, with yellow eye. Suitable for table use where there is no objection to the yellow eye.

Corvette: Early, white, large seed, suitable for table use.

Michelite: Late, white, small seed, suitable for table use.

Robust: Late, small seed, good yield, suitable for table use.

FIBRE FLAX:

Liral Dominion: A new variety developed in Northern Ireland which has given particularly fine results in Canada. Very tall and very vigorous.

Stormont Cirrus: Rather late, very long and strong straw, very good yield of fibre and a fair yield of seed. The quality and strength of straw place this variety among the best.

Stormont Gossamer: Late, long straw, rather weak. Good yield of fibre and very good yield of seed. The fibre is of good quality and this variety ranks with *Cirrus* as one of the best.

GRAIN MIXTURES

Under some conditions it may be desirable to grow mixtures of grain. When this is done, it is important that the varieties used should ripen at the same time. They should be chosen from those that are recommended for the different districts.

EARLY MIXTURES:

| | |
|---|---------------|
| Cartier or Mabel | Rate per acre |
| Any varieties of barley on the recommended list | 50 lbs. |

MEDIUM MATURING MIXTURES:

| | |
|---|---------------|
| Erban or Vanguard | Rate per acre |
| Any varieties of barley on the recommended list | 50 lbs. |

MEDIUM TO LATE MATURING MIXTURES:

The later varieties of oats *Banner* and *Roxton* may be mixed with any of the recommended barley varieties at the same rates as above, but as all of these ripen ahead of the oats there is likelihood of considerable loss.

As the Seeds Act does not provide for seed grain mixtures, those recommended cannot be purchased. It is therefore necessary each year, to make up the mixture at home by using the proper varieties, proportions and rates.

CORN CROPS

ENSILAGE VARIETIES (Open-pollinated):

Silver King (Wis. No. 7): A fourteen to sixteen-row white dent, medium to late-maturing.

HYBRIDS:

Varietal Hybrid:

Algonquin: This is a varietal hybrid. This seed sold is a light yellow colour but the crop grown produces ears with a mixture of yellow and white kernels. The variety is early maturing recommended for silage.

Double Cross Hybrids:

Can. 240: This is a double-cross hybrid: It is a yellow dent variety giving ears with fourteen to sixteen rows. It is early maturing.

Can. 531: This is a double-cross hybrid. It is a yellow dent variety giving ears with fourteen to sixteen rows. It is early maturing.

Can. 606: This is a double-cross hybrid. It is a yellow dent variety giving ears with fourteen to sixteen rows. It is medium maturing.

De Kalb 240: This is a double-cross hybrid yellow dent variety, giving ears with fourteen to sixteen rows, medium maturing, some tillering, leafy.

Pioneer 355: This is a double-cross hybrid yellow dent variety, giving ears with fourteen to sixteen rows, medium maturing — slight tillering, leafy.

ROOT CROPS

SWEDES:

Acadia: A globe-type with purple skin colour. Bred and introduced by the Experimental Farm, Ottawa.

Ditmar's Bronze-Top: A flat-globe to globe-type with green to bronze skin colour. Selected by Mr. R. V. Ditmars of Deep Brook, N.S.

Laurentian: Globe to slightly longer than globe-type with clear purple skin colour. Bred and introduced by the Agronomy Department, Macdonald College, Que.

Wilhelmsburger: Globe-type, with green skin colour. Introduced from Europe. Recommended as possessing resistance to club-root.

MANGELS:

Frontenac: Intermediate, of orange-yellow colour. High in yield and medium in dry matter. Bred and introduced by the Agronomy Department, Macdonald College, Que.

Giant White Sugar: Half-long, white, rather low in dry matter. Bred and introduced by Ralph Moore, Norwich, Ont.

Prince: Half-long, white, low in dry matter, high gross yield. Selected by R. Moase, Annam, P.E.I.

Tip-Top: A short intermediate, of orange-yellow colour, high in dry matter. Bred and introduced by the Central Experimental Farm, Ottawa.

CARROTS:

Giant White Belgian: Very long type, slim, grows one-third out of ground.

White intermediate: Intermediate, grows entirely underground.

POTATOES:

Irish Cobbler: White, very good quality, especially suitable for an early crop.

Green Mountain: White, very good quality, suitable for main crop, on light soils.

HAY AND PASTURE CROPS

RED CLOVER:

Dollard: An early variety which is hardy, high yielding and disease resistant and which will produce two cuts per season. It has been selected from material grown at Macdonald College since 1911 and is well adapted to local conditions. Limited supply.

Ottawa: An early variety which is hardy, a good yielder, hair-stemmed, dark seeded, disease resistant and produces two cuts per season. It was developed by selection methods at the Central Experimental Farm, Ottawa. Limited supply.

ALFALFA:

1st Choice: Registered Grimm.

2nd Choice: Certified Grimm.

MILLET:

a) For grain crop:

Crown: Early maturing, good yield.

Siberian: Medium maturing, very good yield.

b) For hay and pasture crops:

Japanese: Very leafy, very late maturing, very good yield.

Empire: Very leafy, late maturing, very good yield.

MIXTURE FOR HAY AND PASTURE

Mixture "A"

| Components | Rate per 100 lbs. |
|--------------------------------------|-------------------|
| Timothy | 50 lbs. |
| Medium Red Clover (double cut) | 20 lbs. |
| Alsike Clover | 5 lbs. |
| Alfalfa | 25 lbs. |

Total 100 lbs.

Mixture "B"

| Components | Rate per 100 lbs. |
|--------------------------------------|-------------------|
| Timothy | 55 lbs. |
| Medium Red Clover (double cut) | 30 lbs. |
| Alsike Clover | 15 lbs. |

Total 100 lbs.
(In addition 5% Ladino clover if desired)

Mixture "C"

| Components | Rate per 100 lbs. |
|--------------------------------------|-------------------|
| Timothy | 50 lbs. |
| Medium Red Clover (double cut) | 20 lbs. |
| Alsike Clover | 15 lbs. |
| Kentucky Blue | 15 lbs. |

Total 100 lbs.

Mixture "D"

| Components | Rate per 100 lbs. |
|--------------------------------------|-------------------|
| Timothy | 48 lbs. |
| Medium Red Clover (double cut) | 15 lbs. |
| Alsike Clover | 8 lbs. |
| Alfalfa | 16 lbs. |
| Kentucky Blue | 13 lbs. |

Total 100 lbs.

Mixture "E"

| Components | Rate per acre |
|--------------------------------------|---------------|
| Timothy | 8 lbs. |
| Medium Red Clover (double cut) | 4 lbs. |
| Ladino Clover | 2 lbs. |

Per acre 14 lbs.

Mixture "F"

| Components | Rate per acre |
|---------------------|---------------|
| Timothy | 8 lbs. |
| Ladino Clover | 2 lbs. |

Per acre 10 lbs.

Mixture "G"

| Components | Rate per acre |
|-------------------|---------------|
| Timothy | 4 lbs. |
| Brome Grass | 10 lbs. |
| Alfalfa | 6 lbs. |

Per acre 20 lbs.

Mixture "H"

| Components | Rate per acre |
|-------------------------|---------------|
| Timothy | 4 lbs. |
| Reed Canary Grass | 6 lbs. |
| Alsike Clover | 3 lbs. |
| Ladino Clover | 1 lbs. |

Per acre 14 lbs.

CHOICE OF MIXTURES IN RELATION TO SOILS

1.—Mixture A and D: For well drained soils, with a reaction slightly acid to neutral (pH. 6.5 to 7) or slightly alkaline (pH. 7.2 to 8), deep, medium fertility, susceptible to drought like most of the clay loams of the Montreal and Ottawa Valley regions.

Uses of Mixture A: (chiefly for hay):

- In a short rotation (3 to 5 years) including or not including pasture. Rate of seeding 16 lbs. per acre or 13 lbs. per arpent;
- For short term pasture. Rate of seeding 20 lbs. per acre or 16 lbs. per arpent.

N.B.—As alfalfa is included in this mixture, inoculation at home is highly recommended with proper alfalfa inoculant.

Uses of Mixture D: (chiefly for pasture).

- In a five years and longer rotation, including 1 or 2 years of hay and pasture. Rate of seeding, 16 lbs. per acre or 13 lbs. per arpent.
- For seeding of long term pasture. Rate of seeding 16 lbs. per acre or 13 lbs. per arpent.
- Not recommended for hay crop only.

N.B.—See foot note « Use of Mixture 'A' »

2.—Mixture B and C: For poorly drained soils inclined to be acid (pH. 6 to 6.5), shallow, and for one reason or another not suitable for Alfalfa. It is to be noted that these poorly drained soils may be occasionally and highly affected by drought, etc., and, for this reason, are not suitable for Ladino clover.

Uses of Mixture B:

- In a short rotation including or not including one year of pasture. Rate of seeding, 16 lbs. per acre or 13 lbs. per arpent.
- For short term pasture, 20 lbs. per acre or 16 lbs. per arpent.
- For the first Ladino trial, when there are reasons to suspect that mixtures E and F will not do well, add 5% of Ladino to mixture B or $\frac{3}{4}$ to one pound per acre. The addition of Ladino to mixture B is recommended only for pasture.

Uses of mixture C:

- a) For long term rotation, including two or three years of pasture. Rate of seeding: 16 lbs. per acre or 13 lbs. per arpent.
- b) For seeding of long term pasture: Rate of seeding, 20 lbs. per acre or 16 lbs. per arpent.

N.B.—The proportion of alsike clover could be increased when alsike is giving better results than red clover. In this case, mixtures B and C should be prepared at home.

- 3.—Mixtures E and F: For fertile soils, too wet to be perfectly suitable for alfalfa.

The two mixtures have been successfully tried, in many sections of the province, but not always comparatively. There are reasons to believe that mixture F requires a cooler and better soil than mixture E.

Uses of Mixtures E and F:

- a) For seeding of short term pasture
- b) As a source of first quality green crops for silage.
- c) Very good source of hay, which will be more difficult to cure the higher the percentage of Ladino in the hay.

N.B.—These mixtures will give better results when used on soils remaining cooler during all the growing season. They are specially recommended for short term pastures, or for meadows when the first cutting is to be put in the silo and the aftermath to be pastured.

- 4.—Mixture G: Brome grass is a long-lived species that is highly productive in association with alfalfa. In addition it is more drought resistant and when used as a hay crop it remains palatable longer than timothy. Where alfalfa can be maintained, the yielding potential of this mixture warrants some consideration. Although this mixture re-

quires further study, present observations would justify its use under certain conditions.

This mixture has given good results in the warmer regions of the province: Ottawa Valley, Plain of Montreal.

Uses of mixture G:

- a) On fields that are too dry to be included in the pasture rotation or in the regular farm rotation. It is recommended that such seedings be left down as long as alfalfa contributes an important part of the yield.
- b) As a limited acreage in the pasture or farm rotation to increase the flexibility and aid in safeguarding the forage program in the event other mixtures should fail.
- c) The mixture can be used either for hay or for pasture (seeding rate of 20 lbs. per acre or 16 lbs. per arpent).
- 5.—Mixture H: This mixture, as the preceding one, is new and has not been extensively studied. It may eventually prove to be of wide adaptation, but because of our scanty knowledge it is advisable to limit recommendations to a few specific conditions where at present the mixture is known to be useful.

Uses of Mixture H:

- a) As a substitute to the other hay and pasture mixtures, in sections of fields within the pasture rotation or the regular farm rotation which are too wet for other hay or pasture mixtures.
- b) For low, very ill-drained soils or those subjects to flooding at certain periods of the year, and where other crops do very poorly.

N.B.—Mixtures A, B, C and D are sold as such by the regular trade but mixtures E, F, G and H, are not yet on the market and have to be prepared at home.

Barley Contest Winners

The barley sample submitted by Henri Brault, a silver medal winner in the 1950 Merit Agricole Competition, won him first place in the Barley Contest this year. Final judging of samples which had previously won in the regional contests was completed in December, and the organizers of the competition, the Barley Improvement Committee in collaboration with the Quebec Brewers' Association and the federal and provincial Departments of Agriculture, announced the names of the final winners at a dinner held late in January.

Second place in the judging went to Paul Emile Girard of Ste. Rosalie; Elzear Daoust of Howick was third, Abbe Harrington, Chapeau, was fourth, and Ernest Adam of Notre Dame de Lourdes was fifth. The prize money was augmented by a generous grant from the Quebec Department of Agriculture.

Andre Auger, Director of the Field Crops Service for the Department of Agriculture, indicated some of the results of these six years of contests and how barley crops in this province have improved on account of the extra care taken by those who are growing this crop for the contests. Although climatic conditions during the 1951 growing season were not particularly favourable, and prevented any records in quality and yield being made, nevertheless the average yield per acre of the 127 contestants was 51.8 bushels; which is 21.8 bushels above the average for the province.

Quality was not quite as good as a year ago; 51.7% graded No. 1 as against 70% in 1950, and 30.6% was

No. 2 as compared with 12.1% last year. But of all samples graded, the sum of the No. 1's and the No. 2's was about the same. The general appearance of the crops in the field at the time of the field inspection was largely responsible for the large percentage of No. 2 grade, and the excess of rainfall around harvest time was responsible for this.

The contest will be continued in 1952, when an eighth district comprising several counties in the Lower St. Lawrence area will be added.



Four of the five Barley Contest winners, with their samples of grain.

Dairy Farmers View With Alarm

DELEGATES to the convention of the Dairy Farmers of Canada, meeting in Montreal on January 16, 17 and 18, were agreed that the dairy industry is facing trying times, largely on account of the competition of imported vegetable oils, discussion of which took up a good portion of the time of the convention. At least one of the speakers, however, Waldo Walsh, Deputy Minister of Agriculture for Nova Scotia, thought that farmers themselves are to blame to a great extent for not keeping up with the times and making the most of their opportunities. He could find little excuse for not making more use of time and labour saving pen barns for dairy cattle; when farmers would not try this innovation because they would have to dehorn their cows, they were showing little evidence of progressive thinking. Poorly designed barns, though they may be elaborate and expensive, increase chore time and lower efficiency; yet barn planning continues to be done, not by farmers who have learned from experience, but by manufacturers who have fittings to sell.

Manufacturers also came in for criticism from Mr. Walsh who thought we have too many small factories scattered around the country for the most efficient and profitable operation. Regulations concerning their operation were drawn up long ago and some at least are no longer applicable; but they are still on the books. The method of paying for milk, on its butterfat content, also came in for criticism; more attention should be paid, thought the speaker, to the non-fat portion of milk in arriving at a just price for the product.

However, one line of action of which Mr. Walsh approved heartily was the Dairy Farmers' advertising campaign, only he would like to see a much more ambitious programme drawn up. The "June set-aside" last year raised some \$291,000 for advertising, which was spent on newspaper advertising, radio programmes, magazine advertising, truck cards, etc. This is fine as far as it goes, said Mr. Walsh, but, in his words, "it is only peanuts to an industry like the dairy industry of Canada which had gross sales in 1951 of \$450,000,000 and it is only a drop in the bucket when compared with the 2% allocated to advertising by outfits like Sunkist oranges, who have managed to convince mothers that, whatever else you leave out of the child's diet, orange juice is absolutely necessary to health." He thought that money spent on advertising is the best possible investment the dairy industry can make today.

Advertising Brings Results

While we are on this subject, results from the 1951 campaign appear to have been good, although this is something that it is difficult to compile accurate figures on. The campaign is designed to do two things; increase the demand for dairy products on the part of consumers,

and to build up better relations between the farmer and the public. And of these, the second point is probably the more important. The housewife is appalled by the continual rise in the price of milk, cream and butter, and her first reaction is to blame the farmer for gouging his customers. But lately, possibly in some measure on account of the way the advertising campaign has put the farmers' side of the question before her, she is less anxious to blame the farmer for the increase. There is a willingness on the part of the consumer to consider the pros and cons of the situation, whereas a year ago no explanations would be listened to. Advertising will keep dairy foods to the fore in the mind of the consumer, and impress upon him the fact that dairy foods are essential to the diet, and can be varied, flavourful and appetizing.

Milk Uses Changing

W. C. Cameron, associate director of marketing services in the Federal Government, discussed the present condition of the dairying industry. He noted that in Canada and in the other four major milk-producing countries in the world, (The United States, France, Germany and the United Kingdom), the 1951 production is above the 1939 level. Production in Canada has increased, since the pre-war years, some 8%, which is a little less than the average increase for all countries. But the United States produces 40% of all milk, and their increase since 1939 is almost 14%. The level of milk production in Canada, therefore, compares favourably with that of other countries.

He noted a considerable shift in the way milk is used in Canada today as compared with some years ago. Butter and cheese have accounted for less, and there has been a steady increase in the amount of milk sold in the fluid state and for cream, for concentrated products and for ice cream making. For example, in 1934, 55%,



President MacMillan listens while Waldo Walsh tells the dairy farmers a few cold facts.

or more than half of the total Canadian milk production was used for butter; today the proportion is only 43.5%. In all countries the trend is the same, except in New Zealand, more milk going into the fluid trade and manufactured lines, less into butter and cheese.

He thought it likely that this trend would continue, particularly in view of Canada's growing industrial areas, where the demand for fluid milk would be expected to be large. He also brought up the question of the non-fat portions of milk, and felt that we should take pains to determine if the best possible use was being made of all the components of milk. There must be something in whey and buttermilk that could be used better than is the case now, and research should be undertaken on these problems. If these solids have been paid for by the factory—why shouldn't they be used to best advantage? On the other hand, if they have not been paid for by the factory the farmer is losing out. Every pound of milk and its solids should be used and sold for the best possible price otherwise the industry isn't working at full efficiency.

We have everything we need in Canada to keep dairying among the most efficient of all industries; skilled workers, good markets, research organizations at our disposal. We should be sure we are making the most of our opportunity.

Vegetable Oils Scored

Less was heard at these meetings about margarine as such, but the discussion hinged on vegetable oils in general, not only those being used for margarine manufacture. Reports were heard from several speakers that imported oils would soon be found as "fillers" in many dairy products, posing a serious threat to the whole industry. Kenneth Betzner said that fluid milk with the natural cream removed, and fortified with oils, might soon be offered for sale in Ontario, and the president of the National Dairy Council, J. H. Turnbull, claimed that the threat from oils being added to dairy products of all kinds was a threat facing the entire industry.

Vigorous action directed toward relieving the dairy industry of some of its present ills, and concentrated studies directed toward some of the changes that may be necessary with the industry, fairly defines the policy adopted by the delegates.

Of immediate importance to dairy farmers will be the decisions to ask the Federal government for a 63 cent floor price for butter. This is one cent higher than the price asked for last year. Because there is some doubt that it will be possible to negotiate a cheese contract with the British Ministry of Food for 1952, because of currency difficulties, the Dairy Farmers will ask for a floor price of 30 cents per pound for Cheddar cheese, f.o.b. warehouse.

The delegates realized that it might be necessary to again import butter at the end of the present year. The

government will, therefore be asked to make the purchases that may be necessary, but to purchase only butter that conforms to Canadian grade standards, and that such butter be subject to regular inspection of the Federal Marketing Service in the same manner as Canadian butter. The government will be urged to handle the distribution of butter in such a manner that the returns to Canadian producers will not be impaired.

More effective measures to insure the control of the import of cheese and some other dairy products will be sought. The government will be asked to require permits for the importation of such dairy products and that no permits be granted until after consultation with an advisory board of the Dairy Farmers of Canada.

Because there appears a danger that certain imported dairy products carry a duty that is sufficiently low to constitute a danger to the returns of Canadian producers, the government will be asked to increase the duties on these dairy products at the times when these tariffs next come under review.

From every section of the industry came requests for protection against competition from vegetable oils. Describing this item as the "greatest single factor in Canada today in effective contribution to a decline in the dairy industry," legislation will be sought which will adequately furnish the needed protection to the dairy industry. It will be further requested that this legislation will also prohibit the inclusion of any ingredients,—other than defined in dairy legislation,—in any dairy product.

Dairy Farmers of Canada have noted that consumers of butter substitutes apparently find the product unpalatable in its natural colour, and there is some demand that the manufacturers be permitted to colour their product at the factory. The Dairy Farmers will make no objection to this practice, always providing that colour used is other than the natural yellow colours associated with butter.

Studies on a number of matters will be undertaken by the Dairy Farmers of Canada, during the coming year. These will include studying the packaging and merchandising of butter, to place it on a more equal basis in competition with other products, and to protect the quality and flavour. A study will be made of the possibilities of setting up central marketing agencies for the sale of butter and other dairy products. Investigation into the matter of changing the size of milk bottles or other milk containers as suggested in some areas in the country will be undertaken. A study will be made of the newly suggested changes in the butterfat and milk solids—not fat content of milk offered to the public, whether it be offered as milk or under any trade name.

A committee will be set up to study the requirements of the dairy industry and the types and class of legislation that will best meet its needs. The committee may become known as the Legislation Committee.

Ayrshire Breeders Increase Membership

AYRSHIRE breeders of Quebec, meeting at the Queen's Hotel in Montreal on January 17th, were informed that their campaign to get more livestock men into the Association was beginning to show results. Francois Boulais, their secretary and fieldman, reported membership at a high of 1056, which includes a number of former members who had dropped out but who had been persuaded to renew their affiliation. The executive is not yet satisfied, however, and the drive for new members is to continue, for, as president J. P. Lizotte said, "Every Ayrshire breeder is a fieldman and the best boosters for the breed are the breeders themselves."

The Association intensified its publicity and promotion campaign during 1951, inaugurating a series of "Ayrshire News" which was sent to all newspapers, periodicals and radio stations once a month. Some 150 French and English newspapers received this service, which featured local club activities, primarily. The French portion of the Ayrshire Review was edited by the secretary in addition to his other work, which included attendance at practically every event in the province which concerned Ayrshires, at least one contact with every local club secretary, Red and White shows, etc.

The herd classifications programme is progressing and during the year 36 breeders asked for classification and 25 herds were classified by either A. R. Ness or G. Toupin. In this connection it was suggested that a full-time man be hired for this work, which is placing a considerable burden on the two who are now responsible for it, and who have many duties in connection with their regular work.

The Red and White shows accounted for a large proportion of the fieldman's time, but this is an activity that is particularly important. A total of 12 shows were held during the year, at which 103 breeders showed 890 head. Trophies were provided for some of the club shows, and one was given to the best young Ayrshire breeder taking part in the Sherbrooke contest.

Co-operation with the artificial insemination centre at St. Hyacinthe was continued, and data on a number of bulls in which the director of the unit was interested were provided.

Among the resolutions adopted by the meeting was one asking that the R.O.P. regulations be amended so that the minimum charge be reduced from \$10 to \$5, with 3 head the minimum on control in any one herd instead of the present 6. The charge for cows in excess of 3 shall be \$1 per head, and it was asked that steps be taken to assure regular monthly visits from the inspector.

Banquet Well Attended

Dr. Ernest Mercier, Assistant Superintendent of the Experimental Farm at Lennoxville was the guest speaker at the mid-day dinner, and made a strong plea for more use of R.O.P. facilities. "Keeping production records for every cow in the herd is the only way in which we can improve our dairy herds, for type is not an infallible indication of milking ability", he said. Continuing, he pointed out that there are three factors to take into consideration in determining the value of a herd; pedigrees, feeding practices and general management.

Exhibitions, in his opinion, have their place insofar as they give breeders a chance to see what others are accomplishing, and to give them some idea of how their ideas on type agree with those of the experts who judge the classes. But for breeders who cannot or do not wish to take their herds around to exhibitions, herd classification offers the same advantages, since their animals are graded, by experts, on the home farm. There may be some correlation between type and milk producing ability, but it is small. The only sure way of checking on milking ability is by regular weighings under some scheme such as R.O.P., with every cow in the herd on test. Selective control of only a few cows has rendered bad service in the past, and the move toward controlling every animal is gaining in favour, he said. Then, too, only with accurate records can evidence of milking ability be determined to use in progeny testing for sires.

There appears to be no doubt that far too few farmers in Quebec are keeping proper milking records. Only about



Malcolm MacGillvray of Knowlton accepts the trophy he won last summer for showing the top senior herd, senior female and junior female at Bedford Fair. Other trophies presented at the same time went to Jean Godbout, director of the Ferme des Trois Ruisseaux, and W. Paquette of Granby.

5% of all cows in Canada are on R.O.P. which compares with 75% in Denmark, to give one example, where the national average production is 7000 pounds. Our average, according to R.O.P. figures, is from 4500 to 5000 pounds. Evidently, we are not culling out the low producers; and we never will until we have some way of knowing just which cows these are. In the United States, in the last 20 years, intelligent use of R.O.P. figures has increased their average production by 3,200 pounds a year.

With only a quarter of our pure-bred breeders practising R.O.P., this question, in his opinion, is the most important one today in the livestock business.

Others speakers at the dinner included Stan Chagnon, recently returned from FAO meetings in Rome, who urged continued expansion of dairying in Canada so that we will not reach the point of being short of milk. He also hoped that Ayrshire breeders would soon settle their relatively unimportant differences in connection with the choice of location for the Head Office of the National Society and get down to their really important business of working for the good of the breed.

Pierre Labrecque, head of the Livestock Service at Quebec, brought greetings from Mr. Barré, and Alderman Savignac was on hand to welcome the delegates to Montreal on behalf of the Mayor and Council.

Officers elected for the coming year are Nicholas Kelley of St. Damien as president, with Brother Leon of St. Ferdinand as vice-president. On the executive are L. Leblanc, St. Jacques, A. Gagnon, Riviere Ouelle, and F. McQuat, Brownsburg. Francois Boulais was confirmed as secretary and fieldman.

These New Bug Killers

You first read about it in a newspaper or hear of it on the radio. It's a new insecticide claimed to be deadly to a variety of crop-destroying bugs. Advertisements proclaim its wonder. Then it appears on dealers' shelves.

Long before the product reached the dealer, a corps of experts had spent thousands of dollars on development work to make certain the product is everything it is claimed to be. According to a recent report, the cost of developing a new pesticide today ranges from \$165,000 to \$355,000. One firm used up \$1,350,000 in developing a single item. Another poured \$150,000 into research without being able to market its product.

But research and development costs are only part of the story. There is the question of safety. Will the insecticide injure humans, pets, farm animals?

Even if the manufacturer is satisfied his product is safe if handled according to specifications, Canadian federal and provincial agricultural and health authorities subject the material to a series of strict tests and carefully check the safety precautions detailed on the manufacturer's label. Only when complete clearance is obtained from the government can the product be recommended for use.

Using Land Sensibly

Water erosion is taking its toll in all parts of the country and almost invariably this is due to improper land use or faulty cultural practice. Many fields are being cultivated that are too steep for the purpose. Lands that are so steep that gullying and sheet erosion cannot be prevented by practical cultural methods should not be considered as tillable but should be used for grass, wood lots or wild life purposes. There are numerous examples of fields that are being destroyed because they are too steep for satisfactory tillage or the cropping and cultural practices used are not adapted to the specific fields. Also there are numerous examples of similar fields where contour farming, or growing grass, grassing waterways, permitting wood lots to continue on rough areas, or proper tillage, has resulted in practically complete control of water erosion.

Anyone who has seen the wonderful results of the water erosion program developed under the leadership of the U.S. Soil Conservation Service, such as that in use in the La Crosse area of Wisconsin, realizes that a proper land use program can be developed in a real problem area. Many similar conditions can be seen on farms across Canada. The Dominion Experimental Station at Lethbridge, Alberta, has two substations where steep lands are under almost complete erosion control by following simple practices of contour stripping and tillage, grassing of waterways and hillsides, preserving trash covers and sowing fall cover crops where feasible.

In every case the problem of soil erosion finally resolves itself into developing a proper use of the land and satisfactory cultural practice. If anyone is having serious trouble with erosion, the cure almost invariably is to change the use of their land or method of cultivation. The experience of those who have been studying soil erosion, usually has been that the changes required are generally profitable in actual cash returns and the corrective measures often surprisingly simple and easy to apply.

Water Erosion

The weight of an inch of water falling on an acre of land is close to 110 tons. The drops, striking bare soil, splash about $22\frac{1}{2}$ tons of clay or clay loam.

This information comes from the soil research laboratory at the Swift Current experimental farm. It is pointed out that during an intensive rain, the runoff is capable of carrying a heavy load of soil.

Nature prevents soil erosion through a cushion of organic matter which breaks the force of the falling rain drops, the water gently finding its way into the subsoil. Bare land, from which frequent cropping has removed much of the humus, is susceptible to water erosion.

Strippings

by Gordon W. Geddes

After ten years of horse farming we have taken the initial step towards farming with a steering-wheel instead of a pair of reins. Last spring we bought a horse from a Massey-Harris agent to complete our teams. And now we have traded the Massey-Harris horse back to him for a Massey-Harris tractor. One might say that we liked the MH horse so well that it decided us to try a MH gasoline horse. Or one might say that it got us so disgusted with horses that we turned to a tractor. But we are not saying anything except that we have a tractor and only two horses for the first time in ten years. As yet all we are sure of is that when the tractor gets old we cannot sell it for meat or raise a colt from it to replace it.

When we began we thought a tractor was out of reach of our budget. And then we got two wet years when we could not have put our crop in at all with a tractor. The land wasn't even fit for horses to work but it was a case of do or don't. We did and got a crop. By then we thought prices had gone up so much that we would wait a little till they came down. If we had been able to have an accurate forecast of the future ten years ago and had been able to double our debt, we should have made money. Everything we waited for and finally bought cost us much more. We certainly didn't have the forecast and we probably couldn't have doubled our debt as we went in pretty deep. Perhaps if we had a forecast of the next ten years we would have waited longer.

However our work has increased to where we cannot keep up with it. Help costs so much more that we must increase the ability of both the man and me to accomplish work or we can't pay the bill. We have hired a tractor quite a bit which has made a big bill. It also costs quite a lot to feed four horses yet we must have four or have a tractor all the time.

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The way feed is going up and hogs are coming down is not very encouraging but we must not think too much of that or we shall be selling the tractor before we get a chance to try it.

As soon as we sold two horses, we put most of the money from them right back into the other two for we got shoes put on them. One of them is nearly eight years old and has never been shod. The other was shod last winter and we have always kept one shod so we could get off the hill anytime. So far we had been travelling with the truck when it was icy but it got so bad we couldn't draw manure or wood with the horses (or pull out the truck if we got stuck on the ice).

We also planned to start our second decade with the feeding of trace minerals to the cattle. However they have been in Canada about a month now and we haven't got them released from customs so it may be the third decade before we begin to use them. It seems that drugs must be sent for inspection and these are not returned yet. Maybe the inspector never heard of them and is testing them on the office cat.

We sure had a time with the cow the vet gave the works for aceto-

naemia. She had diarrhoea for over two weeks after his physic. Finally we got something from another vet that stopped it but it began again in a few days. Then we used an old prescription from the Family Herald for recurring dysentery. Perhaps it would help someone else if we repeated that. It is 2 ozs. each of tincture of gentian, tincture of nuxvomica and dil. phosphoric acid. Give a tablespoonful twice a day of this.

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Before we called the second vet we started to give her half a dozen raw eggs a day. He said to give her two dozen a day, shells and all. We gave her fifteen for several days but couldn't quite make ourselves think the shells should go in to. He also suggested strong tea. As he put it, they sometimes get well in spite of treatment. After a month she seemed to be able to eat well again and appears to have recovered.

We failed to get any mail the other day. The next morning we found out that the mail carrier had to stop to answer a fire call. This is a pretty small village but through everyone around helping out, they have a good trailer type fire pump with a high capacity, a building to house it complete with tower for drying the hose. There is a siren on top of the tower. It was only seven minutes after the alarm that they had water going and it was their first real fire. Since the house was empty at the time, the fire got a bad start before it was noticed. It was a hard place to fight a fire with some extra partitions next the eaves and three stories high so it was hard to get at the fire. However they put it out and confined it mostly to the portion that was on fire when it was discovered. The man who lived there arrived after some time. About three hours after the start of the fire he remembered his dog shut in the cellar. He jumped in to find water up to his armpits but the dog was sailing around on a slab of wood and got out all right.

Speaking of wood, Hans and I have been sailing around collecting some of that. Last winter it all came from the down wood in the woodlot we bought. It was surprising how many trees were down in the sugar bush in the year. After they were picked up we went back to the woodlot. When he had seen only a small corner of it, Hans said there was wood there for two hundred years. Of course if it is properly handled, there will be wood there forever as a hundred acres will grow a lot of wood per year.

Could Increase World Food Supply

Food production in the under developed nations of the world could be increased by 35 per cent in the next 10 years if governments of these countries would launch an intensive drive to educate their farmers in modern methods of agriculture.

This statement was made by Norris E. Dodd, director general of the United Nations Food and Agricultural Organization at a recent conference in Rome, Italy.

"It will be necessary to stir up a revolution in the minds of tens of thousands of farmers aimed at improving soil management, using ferti-

lizers and pest control chemicals, and accepting mechanized equipment and scientific livestock feeds," Dodd said.

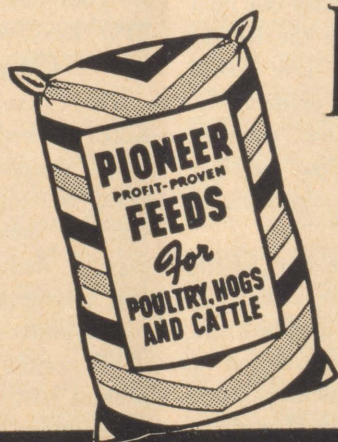
Dodd said that the population in under-developed countries is growing at the rate of one to two per cent a year and was outstripping increases in food supplies. He proposed that the FAO conference set its sights on a 15 per cent increase in food production for the five years ending in 1958 as a possible target in these areas. For the next five years, ending in 1963, the sights should be raised to a 20 per cent increase—a total increase of 35 per cent in 10 years.

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THE WOMEN'S INSTITUTES SECTION

*Devoted to the activities of the Quebec Institutes
and to matters of interest to them*

Common Sense

by Anne Leggett

In September of 1950, Mrs. Coates had an article in the Journal on the three "C's"—Character, Culture, Citizenship. I would like to spend a little while with you in a review of the fourth very important "C" in our everyday life, namely, the use of good, sound, "Common Sense".

I am sure, all of us, having followed the Princess and her husband along their tour of Canada; their receptions in the different provinces, each one with its own traditions, handicrafts and pride of country, must feel very proud of being a citizen of Canada.

In thinking over our privilege of being a Canadian do we realize it means sitting up, taking more interest in our politics, and ruling our country by the use of good, sound, common sense?

When we choose the men whom we wish to represent us in our Dominion and Provincial Government elections, including the Municipal also, we, as women, must see that men are elected in whom we have confidence, men who will give us value for our money, not waste it, and do what is right and proper for the community at large. Do we criticize the School Board and the teachers? It would be far better to use our commonsense instead and attend the meetings, see for ourselves how the education and schooling for our children is administered. Maybe, with little constructive criticism and some with a little more experience in handling children, could help and greatly assist in solving the many problems that constantly arise in matters of education.

Dr. Charlotte Whitton, in a speech at Ottawa to W.I.'s of Eastern Ontario, stated quite plainly it was up to the women of the Institutes themselves to do something about the high cost of living. It was partly our own fault (through noticeable lack of interest in the legislation concerning the rising prices) that these have caused the distress in the lower income brackets that exists today.

Again, as the country's largest buyers is it not "common sense" for women to debate these subjects at our meetings and take the proper constructive steps of approach to these matters?

"Common Sense" is very necessary for our health. Too many women raise their children, look after their many needs, or take care of homes, fathers and brothers, yet neglect their own health. Do you take time off to have that yearly check-up? A healthy housekeeper is a happy one—which means happier homes. Another thing,

do not eat heavy meals after you have done a hard day's work. So many women complain of feeling, "all-in", after a day at the Exhibition, Bazaar, Fair or House-cleaning, and why?—Because they have given those hard worked organs, the heart, liver and kidneys, enough to do without the extra work of digesting a heavy meal on top of a tiring day. Your heart works hard pumping all that blood for you every moment—take care of it—When you are tired, eat lightly, that's "common sense".

Many countries have taken up First Aid courses and Home Nursing. To further assist you in this work, the booklet entitled "Civil Defence, Personal Protection under Atomic Attack", was sent out from the Q.W.I. office to all county convenors of Welfare and Health.

Perhaps, you think or say, how does this affect our particular community? Ours is now a peaceful country, free from all this danger. We all hope it will continue free but we must not be too complacent. Our Province is a wealthy one. There are many towns and cities in it which authorities consider prime targets for attack. We can be hit by mistake, due to errors of navigation, or by planes being intercepted—all these things are conjectures, but not impossible. Also, we may have to look after people being evacuated from the cities and the larger towns. So is it not "Common Sense" to be prepared for these things, by taking up the study of Civil Defence in our groups, and thus be ready for any emergency?

Let us remember three important things—

1. Your first duty is to save yourself. If you die you are of no further benefit to anyone.
2. Your next duty is to save your family—they depend on you.
3. Your final duty is to aid your neighbours.

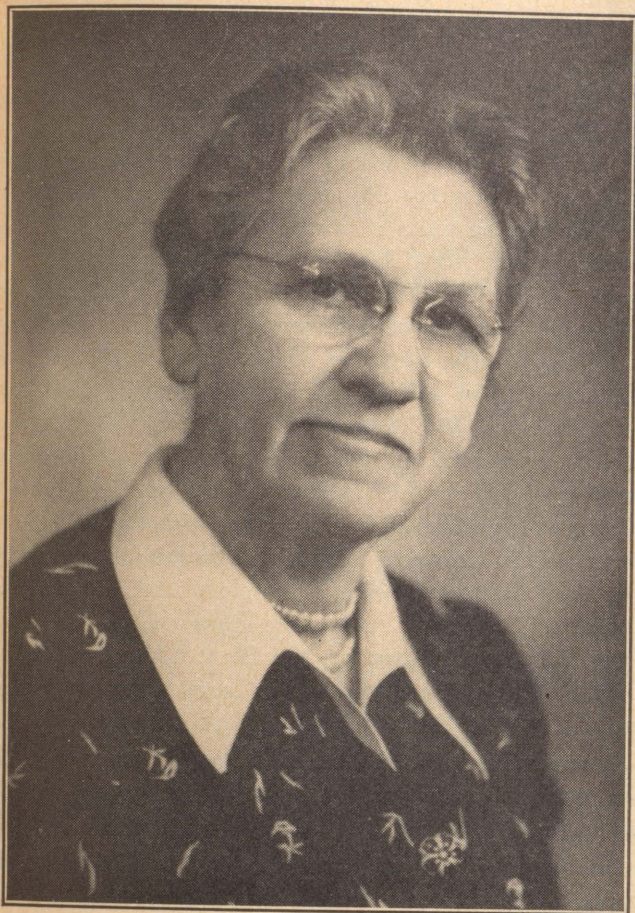
"TO KNOW WHAT TO DO IS TO SURVIVE!"

Canadian Army in Nylons

The Canadian boy serving with the U.N. force in Korea is bedding down these nights in a down-filled nylon sleeping bag. He is tying his shoes with nylon laces, wearing nylon mukluks and a nylon string under-vest. He uses his nylon poncho as a ground sheet, rain cape, a shelter over his slit trench, a sail for his raft and a wrapper for his kit when fording a stream.

His knitted clothing—socks, glove liners and cardigan—all contain 20 per cent nylon. Next summer his present battle dress will be obsolete for he'll be wearing smart nylon combat clothing.

Another Record of Service



"Members of Gatineau County Women's Institutes believe that Mrs. Lusk's 35 years of active service in the Q.W.I. may be a provincial record. Can anyone affirm or deny this?" So runs the closing paragraph of a sketch

of Mrs. Lusk in the September issue of the College Journal. (1951).

This elicited some response from other sections of the province and one of the first to come in was from Mrs. Abercrombie of the Lennoxville W.I. "This branch", he says, "formed in 1914, (the parent Institute in Sherbrooke County) had as its first secretary-treasurer, Mrs. E. L. Atto", and then follows this statement with an impressive record of 37 years of faithful service. Mrs. Atto, she goes on to say, carried on the work of that dual office until 1919 when the two were separated, with Mrs. Atto continuing as secretary until 1923. In that year she was elected vice-president but two months after the annual meeting the secretary left town and Mrs. Atto was asked to resume the work for the balance of the year. The following year she was elected secretary and held the position continuously up to 1934. Since then she has served in that office at varying times, interspersed with terms as president and convenor of Education.

Left a widow with a family of five small children and a farm to manage, she successfully carried on both tasks. One of her daughters, who trained as a nurse, was inspector of Military Hospitals for American forces in Occupied Germany during the last war and is now in charge of a large military hospital in the United States.

Mrs. Atto now resides in the town of Lennoxville and is still keenly interested in the activities of her branch though no longer holding office.

(Ed. Note: Other records, comparable in years of service, will be printed as they come in. We are glad to get them but *please* send pictures also.)

The Month With The W.I.

The cheery spirit of Christmas still shines in many reports. Again we read of this "sharing", both at home and abroad, which is so much a part of that season. One branch, Cavagnal, reports four parcels each weighing 14 pounds going overseas. Chateauguay-Huntingdon, sent the annual county parcel and many reports carry the modest statement, "The usual parcel was sent".—A big story behind those simple words and all honour to those who are thus carrying on.

Argenteuil: Arundel held a party and spelling bee. At Brownsburg Mrs. J. A. McKlintock of the Canadian National Institute of the Blind, was guest speaker. Frontier heard articles on customs of other lands. Lachute had Mr. S. M. Kyes, Supervisor of Music for schools in Argenteuil and Two Mountains, as speaker and Lakefield honored Mrs. Herbert MacDonald with a life membership in recognition of her faithful service. Pioneer held a busy and pleasant meeting with exchange of gifts. Mille Isles contributed money towards school prizes and

to the Tiny Tim Fund at the Children's Memorial Hospital. Upper Lachute and East End held a party and collected linen and cotton for the Cancer Society. Jerusalem-Bethany presented a life membership and remembered all pre-school children in the community with gifts.

Brome: Austin members presented a bouquet of yellow roses and white mums to their hostess, Mrs. J. M. Bryant, who was observing her 50th wedding anniversary. Two minutes silence was observed in tribute to a departed member, Mrs. Carl Juby. Knowlton Landing was pleased to have as guests, Mrs. W. Westover, county president and Mrs. C. B. Cowan, county secretary. Plans for a series of card parties to be held in the homes of the members were made and a white elephant sale was held. South Bolton celebrated their 30th anniversary in their club room with an attendance of 35 (Congratulations). Mrs. W. Westover, county president was guest speaker. The first president, Mrs. Cameron, read the branch history, covering the activities of the 30 years and a huge

birthday cake, made by Mrs. Whittaker, was the "piece de resistance" at the tea hour, each member present lighting the candle opposite her name. Films were shown by Mr. Statten of California. At Sutton the speaker gave many points on "First Aid in the Home". A "Surprise" package sale swelled the treasury, the purchaser to provide the package for the next sale. Contests were conducted by the hostess.

Chateauguay-Huntingdon: Dundee held two card parties. Mrs. Lester Fraser gave a reading by Nellie McClung at the meeting. Franklin Centre had two readings in keeping with the season given by Mrs. Willard Blair and Mrs. G. Williams. Hemmingford held a contest and a demonstration on gift wrapping was held. Cheques of \$10 each were received from the local Council and Mr. H. A. D. Somerville, with praise for the W.I. Howick sent clothing, fruit and vegetables to the Friendly Home, Montreal, and donated \$5 to the Grace Dart Home. Mrs. Alfred Greig gave a resumé of the "Highlights of Howick W.I." since its formation in 1911. Huntingdon sampled a delicious assortment of home made candy brought to the meeting, with the recipes. A demonstration on leatherwork was given by Mrs. W. E. Bernhardt. The president, Mrs. Charles Reid, mentioned the programme, "The Voice of Youth", which originated from Huntingdon High School and was heard over station CFCF, Montreal. Ormstown packed a hamper of jams, jellies, and pickles for the Barrie Memorial Hospital.

Compton: Brookbury donated \$5 to each of the Sunday Schools; all children in the community; the shut-ins and a needy family were also remembered. Other donations were \$5 to the Q.W.I. Service Fund, \$25 each to two members for faithful service rendered, and a gift of \$25 to the bus driver for conveying the children to Bury Sunday School. Bury had the county president as their guest. A visit to Bishop's University was enjoyed, Cookshire School being visited on the return trip. A supper was served to the school children taking part in the recent track meet who won a cup. A gift was sent a member who had moved away, and household articles given to a needy family. 151 entries were reported in the last school fair. Canterbury entertained the Cookshire branch. Mr. Payson Sharman was the speaker and showed films on a recent trip to Germany and Holland. A convalescent member was remembered with a sunshine basket and food sent to the Verdun Hospital. Sawyerville had a demonstration on Christmas decorations. The branch is assisting the Health Unit by having cod liver oil capsules used in the school. Scotstown held a social evening.

Gatineau: Aylmer East reports \$10 given to the newly organized Sunday School. Used clothing was collected for Greece and old cotton and linen for the Cancer Society. Cod liver oil tablets have been obtained for school children. The branch catered to the local Hunt

Club banquet, also sponsored an Amateur Night. This branch sent two boys to the Short Course at Macdonald College. Breckenridge donated \$10 to the Canadian Institute for the Blind, and \$5 each to the Cancer Fund and the Christmas Seal Fund of a neighbouring Institute. Eardley returned completed sewing to the Gatineau Hospital, voted \$10 to Save the Children Fund, and also collected clothing for this cause. Rupert completed plans for the winter series of dances. The sum of \$10 was voted to Save the Children Fund. Wakefield heard a report of the appalling need in some of the European countries from two of their members who had attended a meeting of the executive of Save the Children Fund in Ottawa. The branch is collecting clothes and shoes for this cause. \$20 in membership fees for the Cancer Society was collected from the branch and a similar amount voted for treats for patients at Ste. Annes' Military Hospital. This was taken from the \$71.80 realized from their poppy sale. Hot lunches for the school are being supported. Wright completed their eight week course of St. John's Ambulance First Aid. A delegate from this branch attended the Short Course at Macdonald College. This branch also heard a report of the meeting of Save the Children Fund given by Mrs. Ellard.

Jacques Cartier: Ste. Annes had a social meeting with the members wearing corsages of their own making. Food was collected and a basket packed to send a needy family.

Missisquoi: Fordyce realized \$35.06 from a card party. Gifts and a donation of \$5 were sent to the Children's Memorial Hospital, \$10 voted the Cowansville High School for hot lunches and \$15 to the Brome Missisquoi Perkins Hospital, Sweetsburg. Stanbridge East donated \$20 for hot lunches at the local school, \$15 for community cheer, with each member donating a gift of food for the baskets. The Hobby Show committee was authorized to purchase materials for work in classes. Mrs. E. L. Hodge presented a book review with a contest based on the same subject.

Pontiac: Beech Grove sent donations to the Blind and the Q.W.I. Service Fund, and \$35 towards the repair of the local church basement. Suppers are planned to aid the local rink and a large parcel of cotton was sent to the Cancer Society. Bristol Busy Bees are raising a fund to go towards the purchase of a projector. Shut-ins were remembered here, also. Wyman voted a generous donation to the Institute for the Blind, and Miss Pritchard gave highlights of the tea she attended at Government House, Ottawa.

Richmond: Denison's Mills held a community party with gifts for all the children, 60 in number. A basket was sent to a patient in the hospital. Richmond Hill gave a prize to a girl in Grade V for general improvement and two shut-in neighbours were remembered with sunshine baskets. Shipton sent out three such baskets and cards to local people now in the Wales Home. A recep-

tion was held for a newly married couple. Spooner Pond packed boxes for elderly shut-ins and the county president, Miss Alice Dresser, was a welcome guest at the meeting. Windsor Mills held a fish pond at their meeting, proceeds from this to be used by the sunshine committee. \$5 was voted to the film service of the Adult Education Committee.

Rouville: Abbotsford netted \$11.80 from a sale of home made food. Several bushels of apples were taken to the Veteran's Hospital at St. Hyacinthe.

Shefford: Granby Hill made three quilts which were sent to the Friendly Home, Montreal. Two boxes were also sent to two elderly ladies in that home. A carton of cigarettes was sent a local boy in the army and cards to a hospital patient. South Roxton heard a paper on "The Institute and Money Raising", and a supper for members and their families was planned. Warden sent cheers to local shut-ins and \$10 was voted to the Wales Home.

Sherbrooke: Belvidere held a tea, food and novelty sale, and a quilt, made by the members, was sold. This meeting was the annual party for the children. Brompton Road discussed a First Aid course. A paper, "Fire need not eat your Home" was read by the Home Economics convenor, who also distributed fish recipes. A tea and sale was held and \$5 voted towards cheer for veterans in local hospitals. Cherry River held a sale and voted \$2 each to Save the Children and Greek Relief. Lennoxville heard a report of the art course held under the supervision of Miss Campbell. \$5 was voted for baskets for sick and shut-ins. Orford realized a satisfactory sum from the sale of a doll and wardrobe and a round robin card was sent to a shut-in. A letter from Mrs. F. Davis, England, who visited this branch while visiting in Canada last summer and was made an honorary member of the branch, told of the passing of her husband. Milby remembered the local elderly people and shut-ins, also a member who has been confined to her home because of an accident. Donations were made to the Q.W.I. Service Fund and the TB League.

Stanstead: Ayer's Cliff served a supper to Parent and Teacher's Association meeting at the High School. The Citizenship convenor had charge of the programme and a talk on "Education for Citizenship" was given by the school principal. Four members attended a meeting of the Central School Board. Beebe had a three weeks' course in weaving, rug making and leatherwork, Miss Bruneau instructing. About 40 registered for the course and 75 visitors and workers attended the last day to view the finished work when tea was served. At the meeting Miss Hodgman, county school nurse, spoke on the work of a school nurse and the various tests given the children. North Hatley featured a successful bring and buy sale under the direction of the Home Economics

convenor. A representative attended the local school board meeting. At Stanstead North, Rev. E. C. Amaron, principal Stanstead College, gave a travelogue on a trip to the West Coast. Tomifobia held a paper drive for the Red Cross. Four members attended the weaving class held in Beebe. \$10 was voted to the Cancer Society and old linen was collected for the same cause. Pictures were shown by Mr. B. Elliott, naturalist from Beebe, and the proceeds were given to the W.I. Way's Mills entertained the quarterly county meeting. Pictures were shown by Miss Madeline Taylor R.N. of the Canadian Cancer Society on the detection of cancer. One week's course in rugmaking was held under the direction of Miss Bruneau.

Vaudreuil: Cavagnal collected candy for the veterans at Ste. Annes Military Hospital. \$25 was donated to the local V.O.N. and a \$25 scholarship given. Another shipment of linen has been sent to the Cancer Society. Vaudreuil-Dorion had a discussion led by Mr. Davies, principal Macdonald High School. Keen interest is being shown in the art classes organized under the supervision of Miss Campbell.

Have You ... ?

Do you remember that question in the October College Journal? Have you—A library? A community centre? A school fair? Only two answers to date, Scotstown and Wakefield, who tell about their libraries. Scotstown also mentions the school fair. Call your secretary's attention to these questions and help us make the figures complete.

Every W.I. member has heard about the two libraries mentioned above, the oldest and largest in our W.I., but the story is worth telling again and here it is—briefly.

Wakefield has operated a community library for about 20 years. There are around 2000 books which are housed in the Consolidated School free of charge. W.I. members take turns acting as volunteer librarians every second Friday and the books have recently been re-catalogued by one of the teachers, again a free service. The fee is only 50 cents a year and the branch is finding it increasingly difficult to operate on that small sum. "The fee will have to be raised or the work discontinued", is said in the letter telling about this project. The branch makes a practice of getting a loan from the MacLennan Travelling Library every three months and an occasional donation of books is received from interested friends.

Scotstown W.I. follows a similar pattern in operating its library, which has been successfully carried on for many years. A large collection of books, housed in the school, and volunteer librarians from among the members is the story here also. This branch is fortunate in having the service of the Bookmobile, now operating on a regular schedule in the Eastern Townships by the Travelling Library.

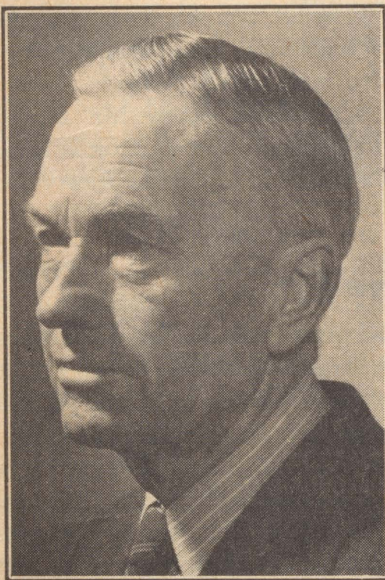


THE COLLEGE PAGE

The Macdonald Clan

Notes and News of Staff Members and Former Students

Dr. Barton Retires



Twenty years ago, Dr. G. S. H. Barton resigned from his post as Dean of the Faculty of Agriculture of McGill University to enter public service as Canada's Deputy Minister of Agriculture. Last month, a large number of Dr. Barton's friend and well-wishers gathered in a room in the Confederation Building at Ottawa to bid him farewell as he stepped down

from his position and entered upon a well-earned retirement.

Since he left Macdonald College, Dr. Barton has served Canada well. He was Deputy Minister of Agriculture until 1949, when he was appointed Special Assistant to the Minister of Agriculture, which meant that he was available for any and all responsibilities which his knowledge and experience had so well qualified him to bear. In 1945 he was one of the pioneers who organized FAO, and he has been Canada's permanent delegate to FAO since that time. He is a past president of the Agricultural Institute of Canada (in the days when it was known as the Canadian Society of Technical Agriculturists), past president of the Eastern Canada Society of Animal Production, and has written a number of authoritative works on agriculture.

He has a B.S.A. degree from the University of Toronto, a D.Sc.A. from the University of Laval, is a Commander of the Order of Agricultural Merit of the Province of Quebec, and in 1923 was created CMG by the King.

His connection with Macdonald College began in 1907, on his appointment to a teaching post in the Animal Husbandry Department. In 1910 he was appointed Associate Professor, and was promoted to a full professorship the following year. In 1925 he was named Dean of the Faculty of Agriculture.

Prof. Ness, who succeeded Dr. Barton as head of the Animal Husbandry Department, reports from the ceremony at Ottawa that both Dr. Barton and his staff were unhappy that he was leaving his active duties. Minister of Agriculture Gardiner paid tribute to his work for Agriculture, stating that he had exerted a great influence throughout the whole Department. In his own words, "Coming down to the end of his great career, when he should have been thinking of slowing up and taking it easy, Dr. Barton was giving better service than ever."

Prof. Ness was Macdonald's representative at the ceremonies, but there were many other Macdonald graduates there; men and women who are now on the staff of the Department of Agriculture or who are serving the cause of agriculture in some other capacity. Among the invited guests was Mrs. Wm. Lochhead, whose husband was the first Professor of Biology at the College.



The Annual Assembly at the College was held on January 23rd. Principal James hands W. E. Vanstone one of the three awards he won.

Information Please!

This section should make interesting reading, for it is given over to the problems of our readers. Problems sent in by Farm Forum and other groups will be dealt with here.

RATS and mice are among man's worst enemies. They destroy his buildings and food supplies and spread disease among human and domesticated animal populations alike.

In the summer, they work in the fields as well as the barn and house, but in the winter they confine their activities to indoors—wherever food is left lying around or dirt is allowed to gather these rodents will be found.

They do millions of dollars worth of damage annually, and equally large sums are spent to try to wipe them out—but to no avail. We cannot wipe them out, therefore, we must learn to control them, control will lessen their chance to spread disease, and save our food supplies. Now is the time, when our barns are loaded with feed and the snow is heavy on the ground, that we should be able to make good progress in our efforts to control these rodents.

The answer to the following request which was supplied by Dr. Morrison, of Macdonald College gives some sound information to help us in our fight against these rodents. It deals only with methods for getting rid of mice which are the less damaging but the more numerous of the two species.

QUESTION. Our group would like to know how to prevent mice from chewing and eating the green feed that is packed away in the mows.

ANSWER. "Cats housed in the barn, if feed is so stacked that they can have passageways through it, will often alleviate the mouse problem. Where those fail it becomes a matter of trapping or poisoning the mice. The ordinary spring traps are effective. Baiting with a little rolled oats scattered on and beneath the tongue is usually more efficient than cheese bait. Traps should be anchored with a cord to staples in the wall or floor and spaced not farther than ten feet apart. As a rule not enough traps are used.

Poisoning is a last resort. It is effective but introduces a hazard to other animals and to children. To reduce the hazard, bait should be exposed in cages of coarse screen wire, which will allow mice only to enter and a record kept of the location of each baiting station so that the unused bait may be collected and destroyed. As with traps, baiting stations should be about ten feet apart. Mice do not travel far and they eat frequently, but very little at a time. They may feed ten or more times a day yet in twenty-four hours they do not consume food weighing more than ten per cent of their own body weight.

The following poison baits should prove effective:

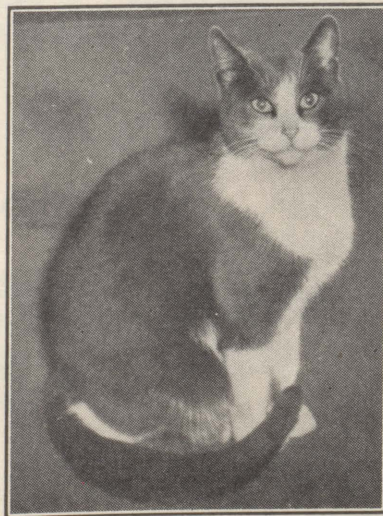
1. Mix $\frac{1}{8}$ oz. of powdered strychnine alkaloid with an equal amount of baking soda and stir this thoroughly into one quart of rolled oats. Expose in paper cups nailed to boards in the bottom of suitable cages.

2. Mix a tablespoonful of gloss starch with $\frac{1}{4}$ teacupful of cold water and stir into $\frac{3}{4}$ pint of boiling water to make a thin clear paste. Mix 1 oz. of powdered strychnine alkaloid with 1 oz. of baking soda and stir into the starch paste until smooth and creamy. Stir in $\frac{1}{2}$ pint of heavy corn syrup and one tablespoonful of glycerine or mineral oil. Apply to ten pounds of grain and spread on paper in a safe place to dry. Expose as before. Strychnine is a **deadly poison**. It does not deteriorate so unused bait should be burned or buried. Mice killed by this poison may be fatal to cats. Handle bait with gloves on.

3. Mix well 10 pounds of rolled oats and 1 to $1\frac{1}{2}$ ounces of zinc phosphide (a grey powder) dry. Add and mix in $1\frac{1}{2}$ ounces of warmed Nujol. Do all the mixing out of doors, and avoid breathing the fumes which are poisonous. Wear gloves. Expose as before in cups or baby chick feeders. Bread crumbs used as above or cubed apples dusted with the product may be used. Expose as before. This loses toxicity in time. It is also changed into a harmless product in the mouse's stomach.

4. A new chemical, "Warfarin", is receiving considerable publicity, and it appears somewhat safer to use now (follow the manufacturer's directions).

5. 50 per cent wettable DDT powder placed in a ring around a pile of bait so that mice must wade through it is quite effective at least at first. Especial care is needed so that the mice do not contaminate feed for stock with the DDT.



This is a good repellant too!

No scientifically tested and approved repellents are known, but many farmers report success from adding quantities of salt when packing green feed—others from sulphur put beneath and on top of the bottom row of sheaves, when packing a mow or stacking out-of-doors."



THE MACDONALD LASSIE